



说明书材质要求：105g 有光铜版纸	说明书成品尺寸：105*143mm
第一：专色用6级防晒油墨+CMYK油墨要求： 1. PANTONE137C专色油墨（专色用6级防晒油墨）： 如果自己配色，油墨配比为：酒联中黄（防晒）2000g 酒联金红（防晒）225g 2. C色油墨：酒联天蓝墨 3. M色油墨：酒联金红墨 4. Y色油墨：pantone123C专色油墨 5. K色油墨：酒联黑墨	第二：特别注意： 1. 印刷时看样请参考我司提供的实物样品颜色。不得偏色 2. 137C的专色不得参考C=0, M=35, Y=90, K=0对应的四色 色谱颜色来看样印刷  Pantone 137C  Black（两色印刷）
折叠方式：风琴折（20P以下 用风琴折）/ 骑马钉（20P以上 用骑马钉） 特殊情况：16P/20P：风琴折 + 对折	备注：

特别注意：此页内容不印刷

风琴折 + 对折 页面顺序

16P 页面顺序

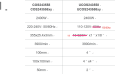
9	10	11	封面
12	13	14	封底

1	2	3	4
5	6	7	8

20P 页面顺序

11	12	13	14	封面
15	16	17	18	封底

1	2	3	4	5
6	7	8	9	10

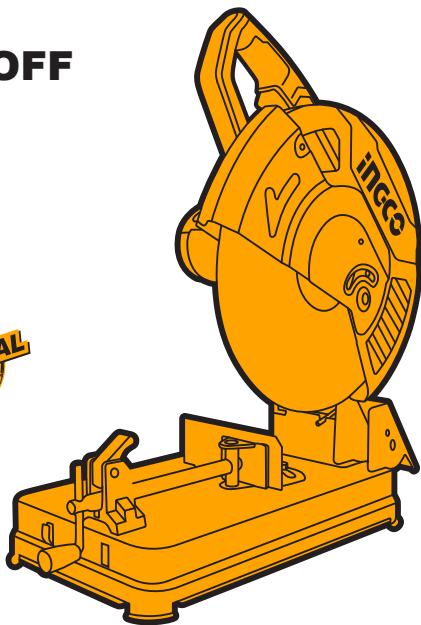
更改记录	1. 加衍生货号			1. 线稿更新			1.  2. 加-4 -3 9			1. 添加UCOS243558-9		
	1123.V03	2023.11.08	YJJ	0424.V04	2024.03.26	YJJ	0424.V05	2024.04.26	xi	1124.V06	2024.11.13	ly
	版本号	日期	设计师	版本号	日期	设计师	版本号	日期	设计师	版本号	日期	设计师

INGCO

www.ingco.com

PRODUCT MANUAL

CUT OFF SAW



COS243558 COS243558xy

UCOS243558 UCOS243558xy

x (blank, 1,2,3,4,5,6,7,8,9,E,S,A,M)

y (blank, -1,-2,-3,-4,-5,-6,-7,-8,-9,E,S,A,M)



SCAN FOR VIDEO

GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this power tool. *Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.*

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*
- c) **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way.** **Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- b) **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.*
- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*
- d) **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** *Loose clothes, jewellery or long hair can be caught in moving parts.*
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** *A careless action can cause severe injury within a fraction of a second.*

4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b) **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- c) **Disconnect the plug from the power source and/or remove the battery**

pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e) **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.*

5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

THE SYMBOLS IN INSTRUCTION MANUAL

	Double insulated for additional protection
	Read the instruction manual before using.
	CE conformity.
	Safety alert. Please only use the accessories supported by the manufacturer.
	Wear safety glasses, hearing protection and dust mask.
	Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

ADDITIONAL SAFETY WARNING

Cut-off machine safety warnings

- a) Position yourself and bystanders away from the plane of the rotating wheel. The guard helps to protect the operator from broken wheel fragments and accidental contact with wheel.
- b) Use only bonded reinforced or diamond cut-off wheels for your power tool. Just because an accessory can be attached to your power tool, it does not assure safe operation.
- c) The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- d) Wheels must be used only for recommended applications. For example: do not grind with the side of a cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.
- e) Always use undamaged wheel flanges that are of correct diameter for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage.
- f) The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- g) The arbor size of wheels and flanges must properly fit the spindle of the power tool. Wheels and flanges with arbor holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- h) Do not use damaged wheels. Before each use, inspect the wheels for chips and cracks. If the power tool or wheel is dropped, inspect for damage or install an undamaged wheel. After inspecting and installing the wheel, position yourself and bystanders away from the plane of the rotating wheel and run the power tool at maximum no load speed for one minute. Damaged wheels will normally break apart during this test time.
- i) Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying

debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.

- j) Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken wheel may fly away and cause injury beyond immediate area of operation.
- k) Regularly clean the power tool's air vents. The motor's fan can draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- l) Do not operate the power tool near flammable materials. Do not operate the power tool while placed on a combustible surface such as wood. Sparks could ignite these materials.
- m) Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

Kickback and related warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel. Pinching or snagging causes rapid stalling of the rotating wheel which in turn causes the uncontrolled cutting unit to be forced upwards toward the operator.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. Abrasive wheels may also break under these conditions. Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- a) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. The operator can control upward kickback forces, if proper precautions are taken. Do not position your body in line with the rotating wheel. If kickback occurs, it will propel the cutting unit upwards toward the operator.
- b) Do not attach a saw chain, woodcarving blade, segmented diamond wheel with a peripheral gap greater than 10 mm or toothed saw blade. Such blades create frequent kickback and loss of control.
- c) Do not "jam" the wheel or apply excessive pressure. Do not attempt to make

an excessive depth of cut. Overstressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage.

- d) When the wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold the cutting unit motionless until the wheel comes to a complete stop. Never attempt to remove the wheel from the cut while the wheel is in motion otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel binding.
- e) Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.

Support any oversized workpiece to minimize the risk of wheel pinching and kickback. Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.

RESIDUAL RISKS

Even when the power tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the power tool's construction and design:

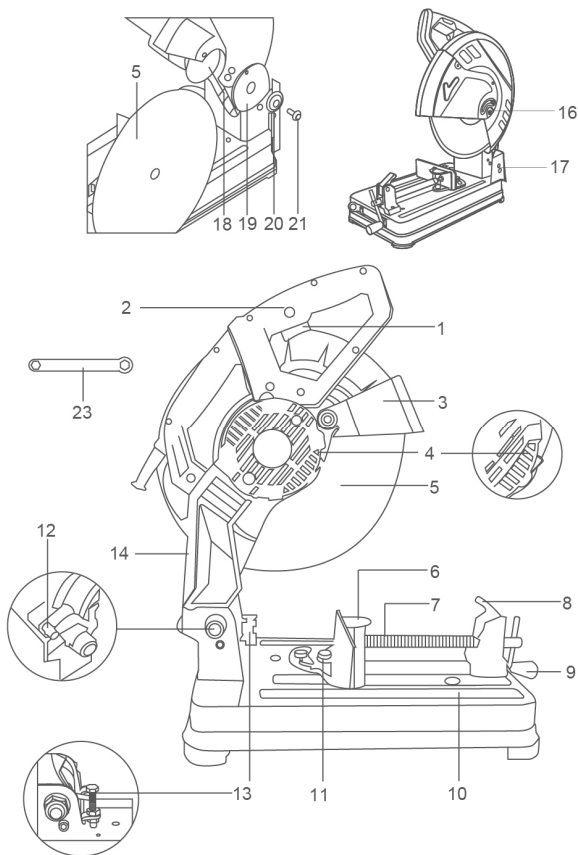
- a) Health defects resulting from vibration emission if the power tool is being used over longer period of time or not adequately managed and properly maintained.
- b) Injuries and damage to property to due to broken accessories that are suddenly dashed.

 WARNING! This power tool produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before operating this power tool.

INTENDED USE

The cut off saw is a stationary machine that uses cutting discs to cut metal materials with and against the grain, in straight lines and at mitre angles up to 45°, without the use of water.

SPECIFICATIONS



Components

- | | |
|----------------------------------|--------------------------------|
| 1. On/Off switch | 13. Depth stop |
| 2. Handle | 14. Tool arm |
| 3. Blade guard (Option) | 15. Transport handle |
| 4. Spindle lock | 16. Retracting blade guard |
| 5. Cutting disc (14") | 17. Spark guard |
| 6. Angle stop | 18. Tool spindle |
| 7. Clamping spindle | 19. Clamping flange |
| 8. Quick-release button | 20. Washer |
| 9. Spindle handle | 21. Hexagon bolt |
| 10. Base plate | 22. Lock nut of the depth stop |
| 11. Locking screw for angle stop | 23. Ring spanner |
| 12. Safety-lock | |

NOTE: *Accessories shown or described are not part of the standard delivery scope of the product.

A complete overview of accessories can be found in our accessories program.

Technical specifications

Model No.	COS243558 COS243558xy	UCOS243558 UCOS243558xy
Rated power input	2400W	2400W
Rated voltage	220-240V- 50/60Hz	110-120V- 50/60Hz
Blade size	355x25.4x3mm	14"x1"x1/8"
No-load speed	3900/min	3900/min
In round pipe	100mm	4"
In square steel	100x100mm	4"x4"
Max. cutting steel bar	50mm	2"

Model No. NOTE: x (blank, 1,2,3,4,5,6,7,8,9,E,S,A,M); y (blank, -1,-2,-3,-4,-5,-6,-7,-8,-9,E,S,A,M)

- Manufacturer reserves the right to change specifications without notice. Specifications may differ from country to country.

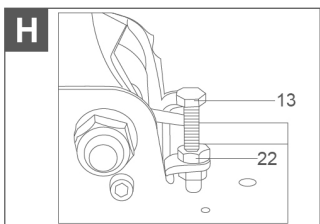
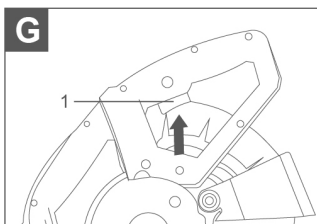
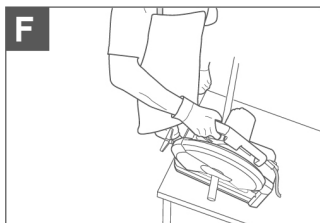
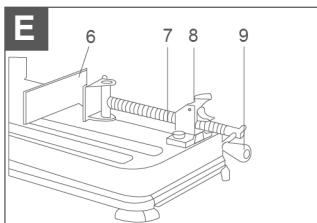
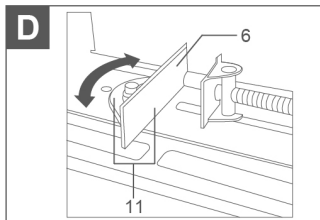
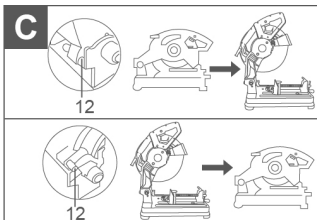
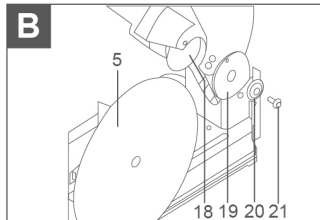
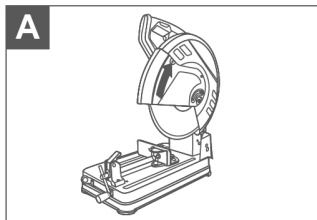
Technical specifications

Model No.	COS243558-9	UCOS243558-9
Rated power input	2400W	2400W
Rated voltage	220-240V- 60Hz	127V~60Hz
Blade size	355x25.4x3mm	14"x1"x1/8"
No-load speed	3900/min	3900/min
In round pipe	100mm	4"
In square steel	100x100mm	4"x4"
Max. cutting steel bar	50mm	2"

Model No. NOTE: x (blank, 1,2,3,4,5,6,7,8,9,E,S,A,M); y (blank, -1,-2,-3,-4,-5,-6,-7,-8,-9,E,S,A,M)

- Manufacturer reserves the right to change specifications without notice. Specifications may differ from country to country.

OPERATION PICTURE



FUNCTION DESCRIPTION

Assembly

Avoid unintentional starting of the machine. During assembly and for all work on the machine, the power plug must not be connected to the mains supply.

Delivery scope

Carefully remove all parts included in the delivery from their packaging.

Remove all packaging material from the machine and the accessories provided.

Before starting the operation of the machine for the first time, check if all parts listed below have been supplied.

Cut-off grinder with mounted cutting disc.

Ring spanner (23).

NOTE: Check the power tool for possible damage. Before further use of the machine, check that all protective devices are fully functional. Any lightly damaged parts must be carefully checked to ensure flawless operation of the tool. All parts must be properly mounted and all conditions fulfilled that ensure faultless operation. Damaged protective devices and parts must be immediately replaced by an authorized service center.

Flexible mounting

In the exceptional case that it should not be possible to firmly bench-mount the power tool, you can provisionally place the legs of base plate (10) on a suitable surface (e. g. a workbench, level floor, etc.) without bolting the machine down.

Dust/Chip extraction

Dusts from materials such as lead-containing coatings, some wood types, minerals and metal can be harmful to one's health. Touching or breathing-in the dusts can cause allergic reactions and/or lead to respiratory infections of the user or bystanders.

Certain dusts, such as oak or beech dust, are considered as carcinogenic, especially in connection with wood-treatment additives (chromate, wood preservative). Materials containing asbestos may only be worked by specialists.

Use dust extraction whenever possible.

Provide for good ventilation of the working place.

It is recommended to wear a P2 filter-class respirator.

Observe the relevant regulations in your country for the materials to be worked.

Changing the tool (see Figure A-B)

Before any work on the machine itself, pull the mains plug.

Actuate the spindle lock (4) only when the tool spindle (18) is stopped. Otherwise, the machine can become damaged.

Do not touch the cutting disc after working before it has cooled. The cutting disc becomes very hot while working.

Use only cutting discs that have an equal or higher maximal allowable speed than the no-load speed of your power tool.

Use only cutting discs that correspond to the characteristic data given in these operating instructions and are checked according to EN12413 and marked appropriately.

Removing the cutting disc

Bring the power tool into the working position.

Swing back the retracting blade guard (16) to the stop.

Turn hexagon bolt (21) with the provided ring spanner (23) and at the same time press the spindle lock (4) until it engages.

Hold the spindle lock pressed and unscrew the hexagon bolt (21).

Remove the washer (20) and the clamping flange (19).

Remove the cutting disc (5).

Installing the cutting disc

If required, clean all parts to be mounted prior to assembly.

- Mount the new cutting disc onto the tool spindle (18) in such a manner that its label faces away from the tool arm.
- Mount the clamping flange (19), the washer (20) and the hexagon bolt (21). Press spindle lock (4) until it engages and tighten hexagon bolt (21) with the provided ring spanner (23). (Tightening torque approximate 18-20 Nm)
- Slowly guide the retracting blade guard 16 down until the cutting disc is covered off.
- Make sure that the retracting blade guard (16) operates properly.
- After mounting the cutting disc and before switching on, check whether the cutting disc is properly mounted and if it can rotate freely.

- Make sure that the cutting disc does not graze against the retracting blade guard (16), the blade guard (3) or against other parts
- Run the machine for approx. 30 seconds. Should significant vibrations occur, switch off the machine immediately; remove and install the cutting disc again.

OPERATION

WARNING!

Before any work on the machine itself, pull the mains plug.

Safety lock (see Figure C)

Before using the machine make sure the safety-lock is opening, and then push the tool arm upward.

After using the machine.

Pull the Plug first, and then close the safety-lock and push the tool arm downward.

Adjusting the cutting angle (see Figure D)

The miter angle can be set in a range from 0° to 45°.

Frequently used mitre angles are identified on the angle stop 6 with appropriate markings. The 0° and 45° position are set at the respective end stop.

Loosen the locking screws (11) for the angle stop with the supplied ring spanner (23).

Adjust the desired angle and firmly tighten both locking screws (11) again.

Displacing the angle stop (see Figure D and E) when cutting workpieces wider than 140 mm, the angle stop (6) can be displaced to the rear.

Completely unscrew locking screws (11) with the supplied ring spanner (23).

Move the angle stop (7) toward the rear by one or two holes to the desired clearance.

Adjust the desired angle and firmly tighten both locking screws (11) again.

Clamping the workpiece (see Figure E)

To ensure optimum working safety, the workpiece must always be firmly clamped.

Do not saw workpieces that are too small to clamp.

Long workpieces must be underlaid or supported at their free end.

Place the workpiece against the angle stop (6).

Slide the clamping spindle (7) against the workpiece and firmly clamp the workpiece

with the spindle handle (9).

Loosening the workpiece

Loosen the spindle handle (9).

Tilt up the quick release (8) and pull the clamping spindle (7) away from the workpiece.

Starting operation

Check the cutting disc before using. The cutting disc must be properly mounted and must rotate freely. Carry out a 30 second (min.) test run with no load. Do not use damaged, out-of-center or vibrating cutting discs. Damaged cutting discs can burst and cause injuries.

User position (see Figure F)

Do not stand in a line with the cutting disc in front of the machine. Always stand aside of the cutting disc. This measure provides for better protection of your body against possible splinters in case of cutting disc breakage.

Switching on and off (see Figure G)

To start the machine, press the On/Off switch (1) and keep it pressed.

NOTE: For safety reasons, the On/Off switch (1) cannot be locked; it must remain pressed during the entire operation.

To switch off the machine, release the On/Off switch (1).

Working advice

WARNING!

Before any work on the machine itself, pull the mains plug.

General cutting Instructions

Do not touch the cutting disc after working before it has cooled. The cutting disc becomes very hot while working.

Make sure that the spark guard (17) is properly mounted. Sparking occurs when cutting metal.

Protect the cutting disc against impact, shock and grease. Do not subject the cutting disc to lateral pressure.

Do not strain the power tool so heavily that it comes to a standstill.

Excessive feed considerably reduces the performance capability of the machine and shortens the service life of the cutting disc.

Use only cutting discs that are suitable for the material to be worked.

Permissible workpiece dimensions

Maximal workpiece sizes:

Workpiece form	Mitre/Bevel 0°	Angle 45°
	Ø100 (4")	Ø80 (3-1/8")
	100x100mm(4"x4")	75x75mm(3"x3")
	160x100mm(6-1/4"x4")	80x75mm (3-1/8"x3")
	120x100mm (4-3/4"x4")	75x75mm (3"x3")

Minimal workpiece sizes

(= all workpieces that can be clamped via the clamping spindle (7))

Length 80 mm

Adjusting the depth stop (see Figure H)

In the delivery condition of the machine, the depth stop (13) is adjusted in such a manner that a new 355 mm cutting disc does not touch the base plate when cutting.

To compensate the wear of the cutting disc, the depth stop can be set deeper.

When using a new cutting disc, the depth stop must then always be set back to the original position.

Always adjust the depth stop in such a manner that the cutting disc does not touch the base plate when cutting.

Bring the power tool into the working position.

Loosen lock nut (22)

Swing the tool arm with the handle (2) to the requested position.

Screw the depth stop (13)

Slowly guide the tool arm upward and tighten the lock nut (22).

Transport

Always carry the power tool by its transport handle (15).

The power tool should always be carried by two persons in order to avoid back injuries.

When transporting the power tool, use only the transport devices and never use the protective device.

MAINTENANCE&MALFUNCTIONS

Possible malfunctions and methods of their eliminations

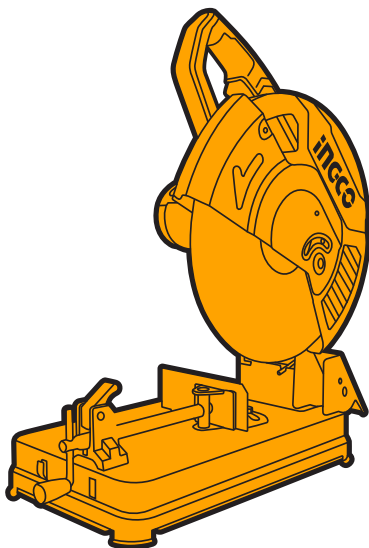
Malfunction	Probable causes	Actions
When the machine is turned on, the electric motor does not work.	● Switch failure ● The power cord or wiring is broken, power cord plug malfunction; ● No brush contact with the collector; ● Wear/damage of brushes	Disconnect the machine from the mains and contact a qualified specialist.
Formation of a circular fire on the collector	● Brush wear/damage of the brush holder; ● Malfunction in the armature coil	Disconnect the machine from the mains and contact a qualified specialist. Please don't repair the machine by your own.
When working, smoke or the smell of burning insulation appears from the ventilation openings.	● Malfunction in the electric motor coil; ● Malfunction of the electrical part of the tool.	
Increased noise in the gearbox	● Wear/breakage of gears or bearings	
When the machine is turned on, the spindle does not rotate	● Gearbox failure.	

Critical state criteria

Critical state criteria	Probable causes	Actions
Cracks on the surfaces of bearing and housing parts	Fatigue deformation of metal	Disconnect the machine from the mains and contact a qualified specialist. Please don't repair the machine by your own.
The power cord or plug is damaged	Overload or breakage	
Excessive wear or damage to the motor or reductor mechanism, or a combination of signs	Fatigue deformation of metal	

Critical state criteria

List of critical failures	Actions
Electric motor sparking	It is necessary to contact a qualified specialist
The appearance of extraneous noise	It is necessary to contact a qualified specialist
If the above malfunctions are detected, it is necessary to disconnect the machine from the mains and contact a qualified specialist	



MADE IN CHINA 1124.V06

   INGCO Global

www.ingco.com

NEWWAY TECHNOLOGY (SUZHOU) CO., LIMITED

No. 20 Dagang Road, Fuqiao Town, Taicang City, China